



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/063,558	05/02/2002	Eiji Oga	1300.01 PD	9769

30439 7590 05/04/2004

DVA / PIONEER DIGITAL TECHNOLOGIES  
SUITE 200  
2355 MAIN STREET  
IRVINE, CA 92614

EXAMINER

THAI, TUAN V

ART UNIT	PAPER NUMBER
----------	--------------

2186

DATE MAILED: 05/04/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/063,558

Applicant(s)

OGA ET AL.

Examiner

Tuan V. Thai

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 2186

**Part III DETAILED ACTION**

***Response to Amendment***

1. This office action is in response to Applicant's communication filed March 19, 2004. This amendment has been entered and carefully considered. Claims 1-10 remain pending in the application. Claims 40-56 have been cancelled.
2. Applicant's arguments with respect to claims 1-10 have been fully considered but they are not deemed to be persuasive.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
4. Claims 1-10 are rejected under 35 U.S.C. § 102(e) as being

Art Unit: 2186

anticipated by Bi et al., hereinafter Bi (USPN: 6,279,153);

As per claims 1 and 6; Bi discloses the invention as claimed including a method and apparatus for running an execution image containing instruction for running a computer program comprising non-volatile memories [742-748] configured to store a compressed version of the execution image (e.g. see column 62, lines 44-48); volatile memory [111A] configured to execute the execution image (e.g. see figure 18; column 62, lines 48-50); and a computing unit configured to transfer and decompress the compressed version of the execution image from the non-volatile memories [742-748] to the volatile memory [111A] wherein the execution image in non-compressed form can be executed efficiently (e.g. see column 62, lines 44-58);

As per claims 2 and 7, Bi clearly discloses the non-volatile memories [742-748] are FlashROM (e.g. see column 62, line 47);

As per claims 3 and 8, Bi clearly discloses the volatile memory [111A] is a DRAM (e.g. see column 62, line 49);

As per claims 4 and 9; Bi discloses wherein the execution image has a header associated therewith and the computing unit executes the execution image directly in the non-volatile memory if indicated by the header (e.g. see column 63, lines 15 et seq.);

As per claims 5 and 10; Bi discloses decompression code for carrying-out decompression is associated with the execution image

Art Unit: 2186

and stored therewith (e.g. see column 62, lines 50 et seq.).

5. As per remark, Applicant's counsel asserts that (a) "The section of Bi et al. cited by the Examiner do not show decompression code to extract the compressed file as recited in the claims of the invention" (page 2, last paragraph), and (b) "Furthermore, the present invention allows the option of execution the "execution image" in volatile or non-volatile memory as indicated, for example, by a bit in a header. For example, claims 4 and 9 recite "a header" associated with the "execution image" which decompresses the "execution image", that is, "execution said execution image directly in said non-volatile memory if so indicated by the header" (claims 4, 9). The sections of Bi et al. cited by the Examiner do not disclose this feature which provides the flexibility of executing the "execution image" in either the volatile or non-volatile memory (page 3, last paragraph).

With respect to (a); Examiner would like to emphasize Bi discloses decompression code to extract the compressed file as recited in the claims of the present invention; for example, Bi clearly discloses that both .EXE file and .COM files, **as well as various other types of files** are compressed and decompressed wherein such files, as known by those of ordinary skill in the art, include a header portion as well as a data or **code portion**

Art Unit: 2186

(which is attached to the file itself) where either data or a software program is stored. It should be noted that the code portion is the portion which called upon to carry out the decompression or to extract of the compressed data filed (e.g. column 62, lines 49 et seq.), Bi further discloses the uncompressed portion of the customized header including a signature field which is attached with the filed and can be used to indicate the version of the compression software, this information is used to call upon for to extract or to decompress the compressed data filed (e.g. see column 63, lines 57-65). With respect to (b), Bi discloses the execution of the "execution image" in either the volatile or non-volatile memory since Bi emphasizes that if the file is to be transferred to the flash memory in the wireless interface device, the file is compressed and written to an output file and transferred to the flash memory devices, and for *files that are currently stored in the flash memory in a compressed format, these files are decompressed and written to the output file for execution* (e.g. see column 64, lines 40 et seq.).

6. Applicant's arguments filed March 19, 2004 have been fully considered but they are not deemed to be persuasive.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the

Art Unit: 2186

extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan V. Thai whose telephone number is (703) 305-3842. The examiner can normally be reached on from 6:30 A.M. to 4:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mathew M. Kim can be reached on (703)-305-3821. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR)

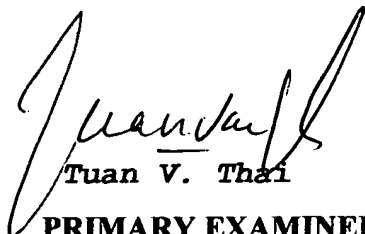
Application/Control Number: 10/063,558

-7-

Art Unit: 2186

system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TVT/April 30, 2004

  
Tuan V. Thai  
**PRIMARY EXAMINER**  
Group 2100